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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,431	07/25/2003	Daniel D. Baker	58912US002	2342
32692	7590	11/16/2004	EXAMINER. CULLER, JILL E	
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			ART UNIT 2854	PAPER NUMBER

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/627,431	Applicant(s) BAKER ET AL.	
	Examiner Jill E. Culler	Art Unit 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-21 and 29-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 29-37 is/are allowed.
- 6) ☒ Claim(s) 8-17 and 19-21 is/are rejected.
- 7) ☒ Claim(s) 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) ✓ | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by PGPUB 2002/0057300 to Baker et al.

Baker et al. teaches an apparatus for printing on a continuous web, 14, of linerless tape for subsequent application to an article, the continuous web, 14, of linerless tape defined by a print side and an adhesive side, see page 5, paragraph 55. the apparatus comprising: a support for a continuous web, 16, of linerless tape; a driven platen roller, 80, located downstream of the support; a print head associated with the driven platen roller, 80, wherein the driven platen roller directs the continuous web of linerless tape past the print head for printing on the print side thereof; see page 5; paragraph 62; and a driven roller, 30, positioned adjacent the platen roller and downstream of the print head for pulling the web of linerless tape from the platen roller; wherein the apparatus is characterized by the absence of a roller forming a nip with the driven roller. See page 4, paragraph 50.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al. in view of U.S. Patent No. 4,577,199 to Saiki et al.

Baker et al. teaches all that is claimed, as in the above rejection of claim 8 except for a belt connecting the driven roller and the driven platen roller, and a first drive motor for rotating either the platen roller or the driven roller.

Saiki et al. teaches a printing apparatus having a belt, 11, connecting a driven roller, 6, a driven platen roller, 5, and a first drive motor, 10, for rotating the platen roller and the driven roller. See column 3, lines 57-59 and Figures 3 and .6

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the invention of Baker et al. using a belt, as in Saiki et al., to connect the platen roller and the driven roller to a first motor in order to directly transmit the power from the motor to the roller.

5. Claims 10, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al. in view of U.S. Patent No. 5,853,117 to Traise.

With respect to claim 10, Baker et al. teaches all that is claimed, as in the above rejection of claim 8 except for a first drive motor for rotating the driven platen roller and a second drive motor for rotating the driven roller.

Traise teaches an apparatus for feeding linerless labels having an infeed roller, 12, driven by a first drive motor, M1, see column 3, lines 51-54, and an outfeed roller, 30, driven by a second drive motor, M2. See column 3, line 65-column 4, line 6.

It would have been obvious to one having ordinary skill in the art at the time of the invention to drive the driven platen roller and driven roller of Baker et al. using first and second drive motors, as in Traise, in order to be able to separately control the speed and motion of the rollers.

With respect to claims 12 and 14, although Baker et al. and Traise do not specifically teach the motors driving the rollers at different times, or the rollers rotating at different speeds, the limitations of these claims do not require any additional structure beyond that supplied by Baker et al. and Traise, and therefore the structure, as claimed, is rejected as in the above rejection of claim 10.

6. Claims 11 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al. in view of Traise as applied to claim 10 above, and further in view of USPGPUB 2002/0090244 to Wood et al.

With respect to claim 11, Baker et al. and Traise do not teach the apparatus is configured such that the first drive motor rotates the platen roller at a first surface speed

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and the second drive motor rotates the driven roller at a second surface speed wherein the second surface speed is greater than or equal to the first surface speed.

Wood et al. teaches a platen roller which rotates at a first surface speed, and the driven roller rotates at a second surface speed, wherein the second surface speed is greater than or equal to the first surface speed. See page 5, paragraph 38.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the invention of Baker et al. to have relative surface speeds, as taught by Wood et al. in order to better control the movement of the tape.

With respect to claims 15-16, Baker et al. and Traise do not teach that the adhesive side carries an adhesive, and the driven roller includes a contact surface for engaging the linerless tape, and the contact surface is configured to minimize adhesion with the adhesive side by including a knurled surface

Wood et al. teaches that the adhesive side carries an adhesive, and the driven roller includes a contact surface for engaging the linerless tape, and the contact surface is configured to minimize adhesion with the adhesive side by including a knurled surface. See page 5, paragraph 40.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the invention of Baker et al. to have the knurled contact surface taught by Wood et al. in order to more effectively transport the tape through the device.

With respect to claim 17, Baker et al. and Traise do not teach teaches a web of linerless tape having a thickness of less than about 90 microns.

Wood et al. teaches a web of linerless tape having a thickness of less than about 90 microns. See page 5, paragraph 35.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the invention of Baker et al. to use a thin tape as taught by Wood et al. in order to produce labels which require less material.

With respect to claim 19, Baker et al. and Traise do not teach the print head is a thermal transfer print head and the apparatus further comprises a ribbon, passed between the print head and the web of linerless tape for printing on the print side thereof.

Wood et al. teaches the print head is a thermal transfer print head and the apparatus further comprises a ribbon, passed between the print head and the web of linerless tape for printing on the print side thereof. See page 4, paragraph 33.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the apparatus of Baker et al. to have a thermal transfer print head, as taught by Wood et al. in order to print without using a liquid ink.

With respect to claim 20, Baker et al. and Traise do not specifically teach that the platen roller is opposite the print head for supporting the linerless tape during a printing operation.

Wood et al. teaches the platen roller is opposite the print head for supporting the linerless tape during a printing operation. See page 4, paragraph 32.

It would have been obvious to one having ordinary skill in the art at the time of the invention to position the platen roller of Baker et al. as modified by Traise opposite

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the print head for supporting the tape during a printing operation, in order to print higher quality images.

7. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al. in view of Traise as applied to claims 10, 12 and 14 above, and further in view of U.S. Patent No. 4,685,815 to Baranyi.

Baker et al. and Traise teach all that is claimed, as in the above rejection of claims 10, 12 and 14, except that after the printer stops printing, the print head moves away from the platen roller.

Baranyi teaches a printing apparatus having a print head, 20, that moves away from a platen roller, 22, after the printer stops printing. See column 5, lines 46-48 and column 6, lines 20-24.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the print head of Baker et al. to be movable, as in Baranyi so that the linerless tape can move past the print head when it is not printing.

8. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al. in view of Traise as applied to claims 10, 12 and 14 above, and further in view of Saiki et al.

Baker et al. and Traise teach all that is claimed, as in the above rejection of claims 10, 12 and 14 except for a one-way clutch bearing in the driven platen roller; and a one-way clutch bearing in the driven roller.

Saiki teaches a one-way clutch bearing on the driven roller. See column 4, lines 1-13.

It would have been obvious to one having ordinary skill in the art at the time of the invention to further modify the rollers of Baker et al. as modified by Traise, to both have a one-way clutch bearing as taught by Saiki, so that they are only subjected to rotational torque when being moved in a forward direction.

Allowable Subject Matter

9. Claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art does not teach or render obvious an apparatus for printing on a continuous web of linerless tape as claimed, particularly including a driven roller positioned relative to a platen roller to define a wrap angle of the web along the driven roller between 10° and 180°.

10. Claims 29-37 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art does not teach or render obvious a method of printing indicia on a continuous web of linerless tape as claimed, particularly including extending the web along a tape path from a platen roller to a driven roller such that the platen roller contacts the adhesive

side and the driven roller contacts the adhesive side, and driving the driven roller to pull a portion of the web from the platen roller by wrapping the web at least partially about the driven roller.

Response to Arguments

11. Applicant's arguments with respect to claims 8-17 and 19-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

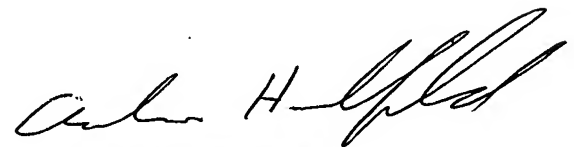
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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill E. Culler whose telephone number is (571) 272-2159. The examiner can normally be reached on M-Th 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jec



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